

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration
14 CFR Part 39 [66 FR 10960 2/21/2001]

[Docket No. 2000-NM-102-AD; Amendment 39-12120; AD 2001-04-02]

RIN 2120-AA64

Airworthiness Directives; Bombardier Model DHC-8-100, -200, and -300 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Bombardier Model DHC-8-100, -200, and -300 series airplanes, that requires inspection to determine the orientation of the Wiggins fuel couplers of the fuel tank vent line and scavenge line in the right wing at station 249, and follow-on corrective actions. This amendment is necessary to prevent contact between the nuts of the Wiggins fuel couplers and the stiffener on the access panel of the upper surface of the right wing, which could compromise the lightning protection of the fuel tank of the right wing in the event of a lightning strike, and could result in possible fuel tank explosion. This action is intended to address the identified unsafe condition.

DATES: Effective March 28, 2001.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of March 28, 2001.

ADDRESSES: The service information referenced in this AD may be obtained from Bombardier, Inc., Bombardier Regional Aircraft Division, 123 Garratt Boulevard, Downsview, Ontario M3K 1Y5, Canada. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Serge Napoleon, Aerospace Engineer, Airframe and Propulsion Branch, ANE-171, FAA, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York 11581; telephone (516) 256-7512; fax (516) 568-2716.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Bombardier Model DHC-8-100, -200, and -300 series airplanes was published in the **Federal Register** on November 7, 2000 (65 FR 66657). That action proposed to require inspection to determine the orientation of the Wiggins fuel couplers of the fuel tank vent line and scavenge line in the right wing at station 249, and follow-on corrective actions.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA's determination of the cost to the public.

Conclusion

The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

The FAA estimates that 195 airplanes of U.S. registry will be affected by this AD.

It will take approximately 1 work hour per airplane to accomplish the actions (inspection) specified in Part A of of Bombardier Alert Service Bulletin A8-28-32, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of these required actions on U.S. operators is estimated to be \$11,700, or \$60 per airplane.

It will take approximately 2 work hours per airplane to accomplish the actions (rework) specified in Part B of the alert service bulletin, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of these required actions on U.S. operators is estimated to be \$23,400, or \$120 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a “significant regulatory action” under Executive Order 12866; (2) is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption “ADDRESSES.”

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-04-02 BOMBARDIER, INC. (Formerly de Havilland, Inc.): Amendment 39-12120. Docket 2000-NM-102-AD.

Applicability: Model DHC-8-100, -200, and -300 series airplanes having serial numbers 003 through 540 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent contact between the nuts of the Wiggins fuel couplers and the stiffener on the access panel of the upper surface of the right wing, which could compromise the lightning protection of the fuel tank of the right wing in the event of a lightning strike, and could result in possible fuel tank explosion, accomplish the following:

General Visual or X-ray Inspection

(a) Within 90 days after the effective date of this AD: Perform a one-time general visual or X-ray inspection to determine the orientation of the Wiggins fuel couplers of the fuel tank vent line and scavenge line in the right wing at station 249, in accordance with Part A of the Accomplishment Instructions of Bombardier Alert Service Bulletin A8-28-32, dated January 14, 2000.

NOTE 2: For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

Action for Airplanes Having Correctly Oriented Fuel Couplers

(b) For airplanes on which the orientation of all Wiggins fuel couplers is found to be correct, as specified in Bombardier Alert Service Bulletin A8-28-32, dated January 14, 2000: Within 5,000 flight hours after the effective date of this AD, rework the stiffener on the access panel of the upper

surface of the right wing in accordance with Part B of the Accomplishment Instructions of the alert service bulletin.

Actions for Airplanes Having an Incorrectly Oriented Fuel Coupler

(c) For airplanes on which the orientation of any Wiggins fuel coupler is incorrect, as specified in Bombardier Alert Service Bulletin A8-28-32, dated January 14, 2000: Prior to further flight, remove the incorrectly oriented Wiggins fuel coupler, and perform a one-time detailed visual inspection to detect damage of the fuel coupler, in accordance with Part A of the Accomplishment Instructions of the alert service bulletin.

NOTE 3: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(1) If no damage is found: Prior to further flight, reinstall the Wiggins fuel coupler in the correct orientation, as specified in the alert service bulletin, and rework the stiffener on the access panel of the upper surface of the right wing, in accordance with Part B of the Accomplishment Instructions of the alert service bulletin. No further action is required by this AD.

(2) If any damage is found, prior to further flight, blend out the damage and perform a detailed visual inspection of the fuel coupler for cracks, in accordance with the alert service bulletin.

(i) If no crack is found, and blending CAN be accomplished to meet the limits specified in the Accomplishment Instructions of the alert service bulletin: Prior to further flight, reinstall the Wiggins fuel coupler in the correct orientation, as specified in the alert service bulletin, and rework the stiffener on the access panel of the upper surface of the right wing, in accordance with Part B of the Accomplishment Instructions of the alert service bulletin. No further action is required by this AD.

(ii) If any crack is found, or if blending CANNOT be accomplished to meet the limits specified in the Accomplishment Instructions of the alert service bulletin: Prior to further flight, replace the Wiggins fuel coupler with a new or serviceable coupler in the correct orientation, as specified in the alert service bulletin, and rework the stiffener on the access panel of the upper surface of the right wing, in accordance with Part B of the Accomplishment Instructions of the alert service bulletin. No further action is required by this AD.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, New York Aircraft Certification Office (ACO), FAA. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, New York ACO.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the New York ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) The actions shall be done in accordance with Bombardier Alert Service Bulletin A8-28-32, dated January 14, 2000. This incorporation by reference was approved by the Director of the Federal

Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Bombardier, Inc., Bombardier Regional Aircraft Division, 123 Garratt Boulevard, Downsview, Ontario M3K 1Y5, Canada. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

NOTE 5: The subject of this AD is addressed in Canadian airworthiness directive CF-2000-05, dated February 28, 2000.

Effective Date

(g) This amendment becomes effective on March 28, 2001.

FOR FURTHER INFORMATION CONTACT: Serge Napoleon, Aerospace Engineer, Airframe and Propulsion Branch, ANE-171, FAA, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York 11581; telephone (516) 256-7512; fax (516) 568-2716.

Issued in Renton, Washington, on February 9, 2001.

Vi L. Lipski, Manager, Transport Airplane Directorate, Aircraft Certification Service.